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Loew's variety hirtipes of hortulanus only approaches it in the more abundant bristles on the legs, it being larger than the true hortulanus with whiter wings, and more white-haired abdomen.

From siculus (Loew, Linnæa i, 344) the female may be at once known by the colour of the thorax, which is black, but the male is not so readily distinguished; Schiner (Fauna Austriaca Diptera, ii., 359) says that it has the base of the abdomen always more or less with a pale pubescence, that the transverse vein is longer than the basal portion of the cubital vein, and that the wing is darker about the costa, but Loew, in the original description says, that the base of the abdomen is only sometimes white haired; siculus is also the same size as hortulanus, therefore larger than anglicus, and is confined to the south of Europe in Sicily and Dalmatia. The male of marci may be at once distinguished by its much larger size and different neuration of the wings, which resembles hortulanus.

The species is very abundant in the neighbourhood of London, occurring in a garden here (Denmark Hill) by hundreds on leaves of shrubs, principally on currant bushes; the female is, as usual, much more sluggish, and therefore apparently rarer than the male, which, on sunny days, is continually flying and hovering about the bushes. It appears about the third week in April, lasting about a fortnight, almost disappearing before the time for hortulanus, which latter comes out about the third week in May; I believe it is common all over the south of England, as it is represented in all collections under hortulanus, though in the British Museum there happen to be only females, which may perhaps account for its having been overlooked. There is certainly no species described by Meigen, Macquart, Loew, or Zetterstedt, with which this can be identical, nor can I find a single description of hortulanus but what says "albopilosus" or its equivalent; I call it anglicus, not that I approve of local names, but I think it suits well here in opposition to siculus, and even supposing it should eventually be found on the continent, it will show that the species was first noticed in England, and is abundant here.

Denmark Hill, London: March, 1869.

DESCRIPTIONS OF SPECIES OF LEPIDOPTERA, CONFOUNDED WITH OTHERS DESCRIBED BY LINNÆUS AND FABRICIUS.

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The following species are some that I have determined during the preparation of a Catalogue of the *Rhopalocera* of Fabricius: many of the errors committed being due to the fact of some authors having

omitted to examine the figures by Clerck as compared with those of Drury or Cramer, and also the types of the Fabrician species in the Banksian collection.

Genus Euchlof, Hübner.

1.-Euchloë Callcuphenia, Butler.

∂ ♀, Anthocharis Eupheno, Hübner, Samml, Eur. Schmett., 1, pl. 84, figs. 421—3 (1805); but not of Linnæus.

♂, Germany (obtained from Herr J. J. Becker); ♀, Gibraltar (obtained 1866 from Mr. Whitely).
 B. M.

This species differs from Eupheno, Linn. (the male of Belia, Linn.) in the male having the prothorax reddish, the orange area of the front wings limited by a blackish streak extending nearly to the anal angle; in Eupheno the orange is cut off obliquely before it reaches the angle: below, both sexes have the hind-wings yellow, varied with white spots and marbled with greyish olivaceous; Eupheno has the hind-wings yellow, not spotted with white, and with three interrupted angulated fulvous streaks crossing the wings at regular distances; Mr. Blackmore, who has taken a good many specimens of the latter species in Tangier, has generously presented four fine males and a female to the collection: this species is figured by Pierret under the name of Douei.

2.—Euchloë Crameri, Butler.

Papilio (D. C.) Belia, Cramer, Pap. Exot., 4, pl. 397, figs. A, B (1782); but not of Linnæus.*

Alæ suprà albæ, ad basin cinereæ; anticæ macula disco-cellulari, punctis minutis costalibus apiceque obscurè cinereis, maculis tribus punctisque ciliaribus albis: posticæ immaculatæ: corpus cinereum, præ-virescens, argenteo-hirtum; antennæ cinereæ, albo-squamosæ, puncto ad apicem clavæ fulvo.

Alæ anticæ subtus albæ, maculá disco-cellulari, pupillà argentea, punctisque costalibus nigris; area apicali olivaceo-viridi, maculas octo marginales, sub-argenteas, inæquales, limitante: posticæ olivaceo-virides, maculis plurimis inæqualibus argenteis ornatæ: corpus albido-virescens.

Exp. alar. unc. 1, lin. 10.

S. Europe (obtained from Herr J. J. Becker).

B. M.

Genus Papilio, Fabricius.

3.—Papilio zonaria, Butler.

Papilio (E. A.) Sinon, partim, Cramer, Pap. Exot., 4, pl. 317, figs. C, D (1782); but not of Fabricius.

^{*} The Ausonia of Hübner cannot stand for this species, but for Dr. Boisduval's Simplonia .- A. G. B.

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Alæ suprà nigræ, fasciis duabus angustis rectis (quarum mediana latior, apud costam bifurcata), lineolá intermediá discoidali necnon altera (cum puncto) sub-apicali, flavido-albidis; maculis octo anticis sub-marginalibus pallidioribus; lunulis sex (sexto duplici) posticis albidis; maculá elongatá sub-anali interná coccineá: caudá alarum apice ciliisque analibus albis. Corpus fuscum, lateraliter pallidè fulvo-striatum; antennæ nigræ, puncto apicali albido.

Alæ subtus multo pallidiores, brunneæ, maculis fasciisque supernis partim nigro-marginatis albidis; posticæ striå coccineå, alam transerrante, sub-interno-basali, ad angulum analem angulatå: corpus fulvo-albidum.

Exp. alar. unc. 3, lin. 2.

St. Domingo (obtained 1855; collected by Mr. Tweedie). B. M.

This is the Sinon of Doubleday's list, but a comparison of it with the type of the Fabrician species in the Banksian collection shows it to be abundantly distinct; indeed, Mr. Doubleday subsequently became aware of this fact, as is evident from a note in his private copy of Boisduval's Species General, "Another sp. see Bank. Cabt." I am indebted for this, and many other interesting notes upon Fabrician butterflies, to Mr. Osbert Salvin, in whose possession Mr. Doubleday's copy of the above work now is, and who kindly lent it to me, to assist me in my Catalogue of the Rhopalocera of Fabricius. Zonaria is most nearly allied to Philolaüs, from which, however, it is abundantly distinct.

Genus Pyrrhopyga, Hübner.

4.—Pyrrhopyga Verbena, Butler.

Papilio (P. U.) Phidias, partim, Linnæus; Clerck, Icones, pl. 44, figs. 3, 4 (1764).

Alæ suprà fuscæ, æneo-nitentes, posticæ obscuriores ciliis omnibus niveis: corpus fuscum, collo anoque coccineo-hirtis; antennæ nigræ.

Alæ subtus fuscæ, anticarum basi posticarumque area interna æneonitentibus, ciliis albis: posticæ fascia externo-costali coccinea: corpus æneofuscum, capite, punctis lateralibus anoque coccineis.

Exp. alar. unc. 2, lin. 1.

S. America (from Mr. Milne's collection).

B. M.

This species is closely allied to Acastus of Cramer, but differs in its more robust form, in the wings being more brassy in colouring, with scarcely a trace of the blue shot, and in the hind-wings below having a scarlet (not yellow) band upon the outer margin. Mr. Hewitson preferred that I should describe this species. We have a good series of Acastus, both sexes, not differing in colour.

Genus NYCTALEMON, Dalman.

5.—Nyctalemon zodiaca, Butler.

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Alæ suprà nigræ, ad basin virescentes, fasciű mediű communi latá, aureo-viridi; anticæ fasciá alterá lineolari, sub-apicali, pallidiore, striolisque costalibus ad basin aureo-albidis: posticæ caudά cæruleo-albá, ciliis albis; maculá squamisque sub-marginalibus analibus: corpus virescens, abdomine pallidiore.

Alæ subtus pallidè virescentes, fasciis fere velut in N. Orontariá, Hübner (Orontes, Linn.), maculis autem posticis sub-apicalibus in marginem sub-rotundatis viridibus: corpus thorace albido, abdomine aurantiaco, cirrhis maris analibus perlongis, ochreis. Exp. alar. unc. 4, lin. 7.

N. China (obtained 1857, from Mr. Fortune's collection). B. M.

This is the *Orontes* of Mr. Walker's catalogue, but is quite distinct from the *Orontes* of Linnæus and Clerck.

6.—Nyctalemon Zampa, Butler.

- 3 Papilio (N.) Patroclus, Drury, Ill., 1, pls. 7, 8, fig. 1 (1770); Walker, Lep. Het., 1, p. 8, n. 2 (1854); but not of Linnæus.
- § Alæ multo majores, pallidiores, colore fundi discalis post fasciam mediam magis diffuso, areaque apicali angustiore; subtus, fascia media alba latior, aliter velut in mare.

Exp. alar. unc. 6, lin. 7; 3 unc. 5, lin. 11.

3, Silhet (obtained 1845, from the Rev. J. Stainsforth).

♀, ——? (from Mr. Children's collection). B. M.

This species is evidently quite distinct from the *Patroclus* of Linnaus (Clerck's Icones, pl. 37, fig. 1), which may possibly be the female of *Patroclaria*, Hübner (*Patroclus*, Cramer, Pap. Exot., 2, pl. 109, figs. A, B), this species, however, seems again distinct from its near ally the *Hector* of Walker, which we have from Borneo and the Philippines.

British Museum: March, 1869

Aphodius porcus, a cuckoo parasite on Geotrupes stercorarius.—Last autumn, I examined the economy of Geotrupes stercorarius in the matter of oviposition, and in doing so met with the unexpected fact that Aphodius porcus was parasitic upon it. As such a habit must be regarded as a highly abnormal one in a Lamellicorn beetle, and consequently requires a considerable amount of proof to establish it, I have given my observations somewhat fully, and have added an account of the oviposition of Geotrupes stercorarius, both because it is necessary towards understanding the proceedings of Aphodius porcus, and because, though supposed to be known by everyone, no one appears to be acquainted with the details of it, nor have I been